Neape of antemme pale yellow beneath; the flagellum back, the apieal half brownish heneath. Face, clypens, and labrim smooth and shining, the middle sparsely and minutely punctured. Mandibles black towards the apex. Frout and vertex smonth. Pro- and mesothorax smoth and shining; the sentellom is yollow, exeept in the middle at the base. The hase, upure part, and centre of the median segment smonth and shiming, the rest rugnsely pmetured ; the posterior median area becomes gradually marrowed from the base to the apex and is keeled down the middle. Pro- and mesopleure smooth and shining; the tubercles are large and pale yellow, and there is a yellow mark below them; the upper halfo of the metapleure is smooth, the rest closely and distinctly punctured. Leges coloured like the body, except that the four anterior are more or less pale yellow in front; the hinder tarsi are hack towards the apex, as are also the hinder tibiae. Wings elear hyaline, the stigma and nervures black. Abdomen smooth and shining; the ventral fold pale yellow.

## LXVIII.-Rhyuchotal Notes.-X. Heteroptera: Fam. Lygeida. By W. L. Distant.

'Ine present contribution relates to the subfamily Lygaine as contained in the collection of the British Museum, with a revision of Walker's determinations in this group. All further study strengthens the opinion that when Walker's types are obtainalle his species (if valid) should stand; but his descriptions are often so imperfect-as they are especially in this family-that where the types are not to be found such descriptions should be considered as non-existent, a course not necessarily harsh when the vast synombiny already ereated is realized and the loose location of the species is remembered.

## L_yg.ein.te.

## Genus Astacors.

Astacops dorycus.
Astacops slorycus, Boisd. Voy. Astrol., Ent. ii. p. (i38, pl. xi. fig. 16 (183i).
Serine the spurcatu, Walk. Cat. Het. ir. 1. 147. n. 11 (1871).
Astacops fuscicollis.
Serinetha fascicollix, Walk. Cat. Het. iv. p. 147. n. 12 (1sic1).
Astacop)s delinectus, Walk. luc: cil. v. p. 3.5. n. 10 (1572).
Aslacops spimipes, Wadk. luc. cit. p. 36, 1. 11.

## Astacops Fieberi.

Astacops Fieberi, Sti̊l, Amn. Soc. Ent. Fr. 1865, p. 187.
Serinetha immunis, Walk. Cat. IIet. iv. p. 148. n. 14 (1871).
Astucops anticus.
Serinetha antica, Walk. Cat. Het. iv. p. 147. n. 10 (1871).
Astacops turbatus.
Serinetha turbuta, Walk. Cat. Iet. iv. p. 148. n. 13 (1871).
Astacops I'alkeri, n. nom.
Astacops unticus, Walk. Cat. 1Iet. v. p. 35. n. 9 (1872), nom. præocc.

## Astacops thoracicus, sp. 1.

Ochraceous; pronotum, scutellum, apical angle of corium, sternum, and abdomen beneath black; apex of scutellum, central area of prosternum, and the abdominal segmental margins ochraceous; rostrim ochraceous, its apex broadly black.

Long. $S \frac{1}{2}$ millim.
Hab. New Gninea, Dory (Brit. Mus.).
Allied to $A$. villicus, Stal, differing by the unicolorous pronotum \&c.

## Astacops abdominalis, sp. 11.

Sanguineous; abdomen above and beneath black; sternum ochraceous; membrane piceous, its apical area pale bronzy. Antennæ sanguineous, the fourth joint ochraceous and about equal in length to second joint; rostrum with the basal joint sanguineous, remaining joints piceous; the margins of the meso- and metasternum more or less levigate; legs sanguineous.

Long. 11 millim.
Hab. Louisiade Archipelago; St. Aignan (Basil Thomson, Brit. Mus.).

A distinctly marked species belonging to the group represented by A. Fieberi, Stål.

## Astacops malayanus, sp. 1.

Stramineous; abdomen above and beneath black; prosternum stramineous; meso- and metasternum ochraceous, with their margins stramineous; antennæ, legs, and posterior margin of corium reddish ochraceous; membrane fuscous; rostrum, posterior lateral margin of corium, and base of
membrane black; abdominal segmental margins narrowly and obsemrely ochraceously pilose.

Long. 11-12 millim.
Mrab. Malay Archipelago; Ké Island (Wrallace, Brit. Mns.).
Allied to A. abdominalis, Dist.

## Genus Scopiastes.

Scopiustes nigripes, sp. n.
Sanguineous; antemæ, apex of eyes, more than basal half of pronotum, scutellum, posterior mangin of corium, mesoand metasternum, posterior margin of prosternum, apical segment and a lungitudinal fascia on each side of abdomen bemeath black; apex of liead, rostrim, and legs dark fuscous; membrane fuscons, with the imer margins piceous.

Posterior area of pronotum very coarsely punctate ; apical joint of antenne longest and stontest.

Long. 6 millim.
Hab. Australia; Queensland, Gayndah (Coll. Dist.).
Allied to S. Degeeri, Stal, but differing by the colour of the legs, unspotted corimm, ©゚.

## Scopiastes affinis, sp. 1.

Sanguineous; antemne, apex of eyes, rather less than basal third of pronotum, scutellum, membrane, meso- and metasternum, and apex of abdomen black; rostrum and legs dark fuscolle.

Posterior area of pronotum very coarsely punctate ; apical joint of antenne longest and stoutest.

Long. 5 millim.
Hub. West Australia, Roebuck Bay (J. J. Walker, Brit. Mus.).

Allied to S. nigripes, Dist., but separable by the different markings to the pronotum and abdomen bencath, smaller size, \&c.

Scopiastes bicolor, sp. n.
Black; eyes (excluding apex), a little less than anterior half of pronotum, comexivum, and body bencath ochraceons; a spot near intermediate coxie, a spot on each side of the second and third basal segments, and the whole diseal area of the fourth, fiffl, and sixth abdominal segments black, the last with their transverse margins ochraccous; central area of meso- and metastemum fuscous.

Posterior area of pronotum very coarscly punctate; liead
centrally suleate; posterior tarsi with the basal joint only very slightly longer than the second and third joints.

Long. $8_{\frac{1}{2}}$ millim.
Hub. Australia, Queensland (Brit. Mus.) ; Gayndah (Coll. Dist.).

In form and colour much resembling Astacops Walkeri, Dist.

Scopiastes militaris, sp. $n$.
Dark fuscous ; about anterior third of pronotum, scutellum, outer median area of corium, head beneath, coxie and trochanters, and posterior areas of meso- and metastemum dark sanguineous; abdomen beneath ochaceous; apical margins of membrane pale hyaline.

Posterior area of pronotum coarsely punctate; head centrally sulcate; posterior tarsi with the basal joint about equal in length to the second and third joints.

Long. $7 \frac{1}{2}$ millim.
Hub. Australia, Queensland (Brit. Mus.).
In form and structure allied to the preceding species, S. Vicolor, Dist.

## Genus Oncopeltus.

## Oncopeltus quadriguttatus.

Cimex 4-guttatus, Fabr. Syst. Ent. p. 720. n. 116 (1775).
Lyyaus sordidus, Dall. List Hem. ii. p. $\overline{5} 3 \mathrm{G}$. n. 8 (185\%).
Lyyceus contigurs, Walk. Cat. Het. v. p. 62. n. 13 (1872).
Pyrrhabaphus contiguus, Leth. \&E Sev. Cat. Gén. 1Iém. t. ii. p. 150 (1844).

Uncopeltus jucundus.
Lygaus jucundus, Dall. List Hem. ii. p. 537 (1852).
Transcaaliul lugens, Dist. Nat. in Transvaal, Append. p. 253, pl. iii. fig. 12 ( $109 \%$ ).

Oncopeltus dispar.
Lygaus diepar, Walk. Cat. Het. v. p. 60. n. 125 (1872).
This very variable species may prove to be but forms of Lygous (Oncopeltus?) amboinensis, Mayr., while O. rulnicatus, Sial, may possibly prove to be another variety.

Oncopeltus maoricus.
Lyyaus maoricus, Walk. Cat. Het. v. p. 64. n. 143 (1872).
Oncopeltus castantipes.
Lyyaus castuncipes, Dall. List Hem. ii. p. 530. n. 10 (1852).
Lyygeus innotatus, Dall. loc. cit. p. 5.37. 1. 12.

## Oncopeltus purpurcescens, sp. 1.

Ochraccous; head, antenne, anterior area of pronotum (sometimes comected by a central line with a basal spot), base of scutellum, a broad medial fascia across eorium, legs, margins of sternal incisures, and apical area of abdomen beneath purplish brown; membrane dark fuscous, the inner angle and a transerse discal spot creamy white.

Pronotum and sentellum with a distinct central longitudinal ridge; apex of head, lateral margins of pronotum, basal lateral margins of corium, and the tibie rather longly pilose.

Loug. $7 \frac{1}{2}-S$ millim.
Hub. Baudin Island, N.Wr. Anstralia (J. J. Wulker, Brit. Mus.).

## Genus Lygeus.

## Lygreus acanthostuurus.

Lyycus santhosturrus, Herr.-Schäll: Wanz. Ins. viii. p. 104, fig. 874 (1048).

Lyyceus maurus (nec Stål), Walk. Cat. Het. v. p. 48. n. C8 (1872).

## Lyygens furcatus.

Cimex furcutus, Fabr. Mant. ii. p. 301 (1787).
Lyygous myulificr, W'alk. Cat. Het. v. p. 55), n. 103 (1872).

## Lygevs concinnus.

Lygreus concimus, Dall. List IIem. ii. p. 542 (1852).
Var. lyycurs campestris, Dist. Nat. in Trausvaal, Append. p. 25:, pl. iii. fig. 10 ( $1812 \cdot 2$ ).

Lyguus anulis.
I.yyceus analis, Dall. List 11 em. ii. p. 540. n. 2.5 (1852).

Lyyceus ruficeps, Stal, Stett. ent. Zeit. xxiii. p. 309. 19s (1862).
In Biol. Centr.-Amer., Rlyneh. vol. i. p. 179 (1882), I stated that the type of Dallas was not in its place in the National Collection and that it probably represented the species described by Stail. I have now discovered the type of L. analis, and found that my supposition was correct.

Lygmus incequalis.
Iypquas incequalis, Walk. C'nt. Het. v. p. 49. n. 70 (1872) ; Stîl, Ěn. Hem. ir. p. 107. n. 22 (1874).
Stal evidently, as was sometimes his practice with Walker's species, adopted the name, but gave his own description. This, however, does not justify tho species standing in Stiol's name, as it dues in Lethierry and Severin's Cat. Cín. Hém.
tom. ii. p. 143, and where again Walker's species is placed (p. 147) as a synonym of L. turcicus, Fabr.

## Lygceus biguttatus.

Cimex biguttatus. Fabr. Syst. Ent. p. 720 (1775).
Lygaus divisus, Walk. Cat. Het. v. p. 62.. n. 138 (1872).
The Fabrician type is in the Banksian collection contained in the British Museum.

## Lygcus mactans.

Lygreus mactane, Stal, Berlin. ent. Zeit. x. p. 162 (1861).
Lygceus ruficeps, Wallk. Cat. Het. v. p. 63. n. 139 (1072).
Walker writes of his L. ruficeps:-"The entirely red head of this species and the red spot on each side of the prothorax distinguish it from $L$. mactans." All the six specimens, however, which he had before him when he wrote his description exhibit the apex of the central lobe to the head as black or fuscous, and there is also the black spot at inner margins of eyes, as described by Stal. The red spot of Walker "on each side of the hind border" of pronotum would have been better described as occupying the posterior lateral margins, and thus equal the "lateribus thoracis pone medium" of Stål.

## Lygeus Bettoni, sp.n.

Pale ochraceous; antenne, legs, apex of head, eyes and oblique basal area on each side of head behind eyes, pronotum with the anterior area and two large discal spots not reaching posterior margin, connected anteriorly and with the anterior area, and also comnected with the lateral margins by a short transverse fascia, scutellum (excluding apex), about apical half of clavus and outer claval margin, lateral margins of corium (not reaching apex) emitting a short central transverse fascia extending about half across the corium, black. Sternum black, its segmental margins and the lateral margins of meso- and metasternum cretaceous white, with three large segmental spots on each side and the posterior lateral angles of prosternum pale ochraceous. Abdomen beneath reddish ochraceous, with its apex black.

Pronotum coarsely punctate, principally on the black markings, and with an oblique transverse incision on each side of anterior area.

Lorg. 91 $\frac{1}{2}$ millim.
Hab. British East A frica (C. S. Betton, Brit. Mus.).

## Genus Trophotholiax.

Melanospilus, Stâl, Hem. Fabr, i. pp. 72 \& 75 (1868), nom. proocc.
Tropillothorax, Bergr. Ann. S̄c. lint. Belg. xxxviii. p. 547 (l8j4), n. nom.

Tropidothorax concisus.
Lygreus concinus, Walk. Cat. Het. s. p. 60. n. 127 (1872).
Head black, with a lateral spot behind and in front of the base of the antenne and a central basal spot red ; pronotum reddish ochraceous, with two large rounded transverse basal black spots, alinost reaching the basal and lateral margins, which are ochraceous, the spots divided centrally by a raised reddish-ochraccous line; apex of clavus and the corium ochraceous, the last with a large oblique discal black spot.
'This species is very variable in the character of the discal spot to the corium. The one most pronounced in the specimens now befure me is the type from Lombok; those with the smallest (very small) spot are from Flores. Two specimens from Sumbawa in my own collection are intermediate in that respect.

## Genus Graptostethus.

## Graptostethus servus.

Cimex servus, Fabr. Mant. Ins. ii. p. 300 (1787).
Lygreus inaqualis, Walk. Cat. Het. v. p. 57. n. 116 (18i2).

## Graptostethus quadratomaculatus.

Lygreus quadratonaculatus, Kirby, Journ. Linn. Soc., Zool. xxiv. p. 93 (1891).

Gruptostethus diffusus.
Lygaus difusus, Walk. ('at. IIet. v. p. 59. 11. 124 (1872).

## Graptostethus muculatus.

Lygaus maculatus, Ball. List IIem. ii. p. 54.5. n. 42 (1852).
Graptostethus? verticulis.
Lygeus verticalis, Dall. List Ilem. ii. p. 5.48. n. 49 (1852).
The type is in bad condition and now without rostrum, thus rendering its generic position doubtful.

## Graptostethus grandis, sp. 11.

Reddish ochraceous; extreme apex of head, centre of anterior margin, and two large basal subquadrate spots with Aun. \& Mag. N. Mist. Sier. 7. Vol. vii.
their bases almost extended to the posterior angles of the pronotum, basal and lateral margins of scutellum, apical margins of clavus, a transverse central fascia to corium, membrane, anterior and lateral margins of prosternum, anterior margins of meso- and metasternum, anterior margin of apical segment, and extreme apex of abdomen, rostrum, legs, and antennæ, black; a spot near the lateral margins of proand mesosternum, a spot near posterior coxæ, and a larger transverse spot on each side of metasternum deep shining black.

Shape and structure of $G$. rufifemoratus, Dall.
Long. $11 \frac{1}{2}$ millim. ; max. lat. $4 \frac{1}{2}$ millim.
Hab. Nyasaland, Fort Johnson (P. Rendall, Coll. Dist.).

## Graptostethus pictus, sp. n.

Reddish ochraceous; base and a central longitudinal fascia to head, centre of anterior margin and two large basal subquadrate spots extending to and occupying the posterior angles of the pronotum, scutellum (excluding apex), an elongate spot on posterior area of clavus, a central transverse spot joined to outer margin of corium, membrane, spots to connexivum, three lateral spots on each side of sternum, legs, antennæ, and rostrum, black. Membrane with a central and apical white spot. Antennæ with the second joint a little longest, third and fourth joints subequal in length.

Long. 6-6 $\frac{1}{2}$ millim.
Hab. Port Natal (Brit. Mus.) ; Transvaal, Pretoria (Coll. Dist.).

Allied most closely to the Indian species G. maculatus, Dall.

An apparently scarce species. The British Museum has long possessed one specimen from Natal, and I met with but one example during four years' collecting in the Transvaal.

## Genus Nicuesa.

## Nicuesa affinis, sp. n.

Black; pronotum, prosternum, lateral margins of the corium, and apical margins of the membrane (narrowly) stramineous. Antennæ finely pilose, the second and fourth joints subequal in length; pronotum reticulately carinate and with a short central black fascia on anterior margin.

Long. 7 millim.
Hab. Ecuador, Paramba, 3500 feet (Rosenberg, Brit. Mus.).

Allied to $N$. speciosus, Dist., from which it can be at once separated by thie different colom of the pronotuan and prosternum.

Genis Arocatus.
Arocatus ruslicus.
Tctralaccus rusticus, Stål, Berl. ent. Zeit. x. p. 163 (1866).
Astacops? caligatus, Walk. Cat. IEt. v. 1. 35. n. 14 (1872).
Lygreus subjectus, Walk. loc. cit. p. 62. n. 137.
Lygreus ruficollis, Walk. luc. cit. p. 64. n. 142.
Genus Cenocoris.

## Cenocoris Nerii.

Lygaus Neriii, Germ. Faun. Eur. p. 24.
Cenocoris Verii, Fieber, Europ. Hem. p. 166 (1861).
Lygreus semirubes, Walk. Cat. Het. v. p. 58. n. 117 (1872).
I possess specimens from Sind, which may probably be the locality of the "E. Indian" specimens in the British Museum. My Sind examples are indistinguishable from others collected by Mr. Trovey Blackmore in Morocco.

## Genus Nysius.

## Nysius jamaicensis.

Nysius jamaicensis, Dall. List 11em. ii. p. 5.5.5 (185:2).
N'ysius providus, vars., Uhler, l'roc. Zoril. Soc. 189:3, p. 705.
Nysius providus, Uhler, loc. cit. 1894, p. 182.
Prof. Uhler enumerated the species in 1893 (supra), but described it in the following year (1894). The specimens he first denominated as providus, vars., he returned labelled N. scolopax, Say, var.; but Uhler remarks " the true N. scolopax, Say, has a rostrum which reaches to the middle of the venter, which is not the case in the species here described."

## Nysius scolopax.

Lygeus scolopax, Say, New Harm. Ind., Dec. 1831 ; Compl. Writ. i. p. 330.8 (1859).

Belonochilus? scolopuri, Stål, En. IIem. iv. p. 122 (1874) ; Leth. \& Ser. Cat. Gén. Hém. t. ii. p. 156 (1894).
Nysius scolopar, Uhler, Pros. Zool. Soc. 1894, p. 182.

## Species not belonging to the Lygaidre.

## Coreidæ.

Serinetha subrufescens.
Lygcus subrufescens, Kirby, l'roc. Zool. Soc. 1888, p. 5.53 ; Monogr. Christmas Island, p. 128. 11. 3.
Mr. Kirby was evidently misled by the displacement of a

Walkerian type. He writes, "Allied to L. longiusculus, Walk." This type is missing, and a specimen of a Serinetha was in its place. The figure given in the Monogi. Christ. Isld. pl. xv. fig. 3, by the appearance of the pronotum is of practically little assistance.

## Summarized Disposition of Walker's Genera and Species belonging to the Subfam. Lygæinæ.

## Species considered valid and ilescribed under correct Genera.

Astacops anticus, Walk. Cat. Het. v. p. 35. n. 9 (1872), nom. prieoce. (A. Walkeri, Dist., n. nom.).

Lygaus californicus, Walk. loc. cit. p. 42. n. 20.

- incequalis, Walk. loc. cit. p. 49. n. 70.
_ incertus, Walk. loc. cit. p. 64. n. 145.
N Nsius contiguus, Walk. loc. cit. p. 69. n. 25.
Species considered valid, but requiring generic revision.
Lyyceus anticus, Walk. (part.), Cat. Het. v. p. 46. n. 51 (1872), belongs to gen. Jadera.
—_diffusus, Walk. loc. cit. p. 59. n. 124, belongs to gen. Giraptostethus.
——dispar, Walk. loc. cit. p. 60. n. 125, ", "Oncopeltus.
—_ concisus, Walk. loc. cit. n. 127, ", " Tropidothorar.
——maoricus, Walk. loc. cit. p. 64. n. 143, ", " Oncopeltus.
Species treated as synonymic.
Astacops delineatus, Walk. Cat. Het. v. p. 35. n. 10 (1872), $=$ Astacops fascicollis, Walk.
—— spinipes, Walk. loc. cit. p. 36. n. 11, = Astacops fascicollis, Walk.
- nigricornis, Walk. loc. cit. n. 12, =Serinetha vicina, Dall.
-? caligatus, Walk. loc. cit. n. 14, =A ocatus rusticus, Stal.
Lygaus murginalis, Walk. loc. cit. p. 45. n. 45, = Jadera heematoloma, H.-S.
- dimidiatus, Walk. loc. cit. n. $46, \quad=$ Lygeus bicolor, H.-S.
——anticus, Walk. (part.), loc. cit. n. 51, = Jadera sanguinolenta, Fubr.
-_ conspersus, Walk. loc. cit. p. 47. n. 57, =Jadera ๕ola, Dall.
——murus, Walk. (nec Stal), loc. cit. p. 48. n. 68,=Lygaus santhostaurus, H.-S.
——marginifer, Walk. loc. cit. p. 55. n. 102,=Lygceus furcatus, Fabr., var. Fairmairei, Sign.
—— angulifer, Walk. loc. cit. n. 103, =Lygrus furcatus, Fabr.
——incqualis, Walk. loc. cit. p. 57. n. 116, = Graptostethusservus, Fabr.
—— semirubes, Walk. loc. cit. p. 58. n. 117, = Cenocuris Nerii, Germ.
——contiguus, Walk. loc. cit. p. 62. n. 136, = Oncopeltus quadriguttatus,
[labr., var.
—_subjectus, Walk. loc. cit. n. 137, =Arocatus rusticus, Stàl.
——divisus, Walk. loc. cit. n. 138, = Lygous biguttatus, Fabr.
——ruficeps, Walk. loc. cit. p. 63. м. 139, = Lygaus mactans, Stål.
_ruficollis, Walk. loc. cit. p. 64. n. 142, = Arocatus rusticus, Stål.
N'ysius proximus, Walk. loc. cit. p. 69. n. 26, = Nysius contiyuus, Walk.

To be treated as non-e.xistent.
Species the lypes of ohlich are not now to be found in the British Museum.
Lygaus coynatus, Walk. Cat. Het. r. p. 49. n. 69 (1872).

- japonicus, Walk. loc. cit. p. 58. 1. 118.
- lonyiusculus, Walks. loc. cit. p. (i). n. 126 .
- singularis, Walk. loc. cit. p. 63. n. 140.

Nysius mundus, Walk. loc. cit. p. 69. n. 27.
-subcinctus, Walk. loc. cit. p. 70, n. 31.
-_ pallipennis, Walk. luc, cit. p. 71. n. 32.
LXIX.-New Myotis, Artibens, Sylvilagus, and Metachirus from C'entral and South America. By Oldfield 'ihomas.

## Myotis simus, sp.n.

A small short-haired Myotis, with very much the general facies of a Pipistrellus or one of the smaller Scotophili.

Size small. General build and appearance very different to those of other American species of Myotis, and more as in Pipistrellus or Scotophilus. Head broad and flat, muzzle swollen and tumid. Ears rather short, reaching when laid forward about halfway between the eye and the tip of the nose; their inner margin evenly convex for their proximal three fourths, slightly concave above; tip narrow; outer margin concave for the upper and convex for the lower half; antitragal notch scarcely perceptible; basal lobe forming a prominent thickened point projecting forwards. Tragus pointed, slightly curving outwards above, its inner margin convex, its outer concave above, convex below; a small triangular lobule at the outer base.

Wing-bones comparatively stont, as also are the tibiæ. Wings attached to the ankle. Postcalcareal lobule practically absent. Tail included in interfemoral membrane to the extreme tip.

Fur of body short and sparse (hairs of back about 2.5 mm . in length), not extending on the wing-membranes, and only on the interfemoral for its basal third, above and below. No fringe on interfemoral.

Colour above and below pale tawny brown, about as in some of the small pale species of Scotophilus. Wing-membranes darker brown, without lighter edging.

Skull rather broader than usual, with a shorter muzzle. In the ordinary small $\Lambda$ merican Myotis the distance across the palate at the outer corners of $m$. ${ }^{2}$ is just equal to the lengtl,

